

# Financing the Production and Marketing of Texas Broilers

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## SUMMARY

A study was made during 1955-56 on the needs, sources and terms of credit used in broiler production and their effect on the production, marketing and returns of the grower. Most of the information was obtained directly from broiler producers and commercial feed dealers in the Center, Gonzales and Waco producing areas of Texas.

In addition to a good demand for broilers and increasing efficiency in production, the financing structure for broiler production has been a primary reason for the recent rapid growth of the broiler industry in Texas.

The amount of investment and working capital needed in broiler production is relatively high as compared with most other farm enterprises.

At present prices, a capital investment of approximately \$4,500 is required to construct and equip a 6,000-bird-capacity broiler house, or about 75 cents per square foot. For each 6,000-bird-capacity house, a producer will need operating capital by marketing time of approximately \$3,600, or 60 cents per bird.

Investment capital is obtained principally from individuals and lumber companies, while practically all operating capital is supplied by feed dealers. Producers usually give real estate security for their broiler-house cost and the birds as security for their production costs. Investment capital loans generally draw 6 percent interest, are payable in installments and mature within 5 years. Operating capital, principally in the form of chicks and feed, is paid for in the markup of the dealer and to a small extent by financing charges. Settlement on operating loans is made in accordance with the grower's particular financing plan when the birds are sold.

Broiler producers shift from one financing plan to another in meeting their production expenses. Producers tend to shift their risk of loss to the dealers by operating under one of the no-loss or guaranteed income plans during low price periods for broilers.

A producer's cost of financing under the open-account plan averages about 1 cent per chick, with and additional 1 cent added for a no-loss plan. Under the other plans of financing, a grower's account is charged with at least as high a price for the chicks as under the no-loss plan. Under all financing plans, feeds are charged to growers' accounts at no discount in price. Dealers charge more or widen their margins on chicks and feed in proportion to the amount or risk involved and in guaranteeing producers return for their labor and capital.

No significant differences were found in the production efficiency of the open-account and cash producers considered in this study. In either case, however, the producer assumed all the risk. Dealers provided the same services, including marketing, to their open-account and cash customers as to those they financed under heavier risk to themselves.

Substantial savings were made by producers who paid cash for their feed and chicks. On the basis of each 1,000 birds produced, they saved, on an average, \$24 in feed cost and \$13 in chick cost over the open-account producers. On the basis of each pound produced, cash producers saved 1.36 cents per pound, excluding hired labor and overhead costs. Any of the other financing plans used by growers indicated less savings and higher costs to the grower, but there were less physical and price risks for them to assume.

Net return to cash growers as compared with credit growers was considerably higher. After adjusting for price differences, the cash growers received a net return of \$30 per 1,000 birds sold more than the open-account credit growers. A producer, in deciding between operating on a cash plan or on any of the credit plans, should consider the higher return assured on a cash basis as compared with an open-account plan.

## COVER PICTURE

Broilers ready for market. Picture courtesy of Texas Farm Products Company, Nacogdoches.



# Financing the Production and Marketing of Texas Broilers

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COMMERCIAL BROILER PRODUCTION IN TEXAS has increased rapidly during the past 10 years. Texas produced 12 million broilers in 1946 and nearly 80 million in 1955, more than 7 percent of the U. S. total production, Table 1. A further increase occurred in 1956.

This increase in broiler production has provided farmers with profitable employment and favorably affected the commercial feed industry, chick hatcheries and processing plants. The growth of the broiler enterprise increased the incomes of most farmers and others engaging in it.

Feed manufacturers and dealers played an important role in the recent development of the industry by providing most of the required production and market financing. While adequate and liberal credit, principally on the part of feed dealers, has been a major factor in the expansion of Texas broiler production, an increasing market demand and important technological advances in production also contributed.

## OBJECTIVES

Objectives of this study were:

1. To examine the financial requirements of the production and marketing of Texas broilers.
2. To ascertain the extent to which producers are financed, the sources, cost and terms of the credit used, and the effect of financing on their production and marketing practices.
3. To compare the costs of production and marketing by producers using credit arrangements with those operating on a cash basis to explain the effects of paying cash on the growers' returns.
4. To weigh the advantages and disadvantages of a dealer credit plan of financing and a cash plan of operation.
5. To determine the extent to which lenders exercise control over the production and marketing of the birds they finance and to what extent the producer shares in the production and marketing decisions.

TABLE 1. NUMBER OF BROILERS PRODUCED IN TEXAS, 1946-55

Year	Broilers, thousands	Percent of U. S. total
1946	12,474	4.53
1947	10,603	3.59
1948	14,208	3.99
1949	25,290	5.04
1950	33,383	5.53
1951	50,408	6.26
1952	60,994	6.88
1953	65,264	6.82
1954	71,790	6.85
1955	79,687	7.39

## METHODS OF STUDY

Grower questionnaires were obtained from 41 cash producers in the Center, Gonzales and Waco areas on 84 broods of birds produced in 1955 and the first 5 months of 1956. These questionnaires reflect individual items of cost and total cost of production on a cash basis. Cost-returns records also were obtained in the same areas on 45 open-account credit broods to facilitate valid comparisons of financing costs.

Twenty-five feed dealers in the three areas were interviewed regarding their financing arrangements with producers. Records of customer cost of production were obtained, including financing charges made on credit customer accounts, discounts on chicks, feed and supplies to cash growers, marketing and other services to their producers.

## FINANCING BROILER GROWING

Financing is a significant aspect of the broiler-growing industry in Texas. More than 90 percent of the growers use credit to cover their

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production expenses and most of the new growers require credit in acquiring needed facilities. The amount of investment and working capital needed in broiler production is relatively high as compared with most other farm enterprises.

### ***Capital Requirements***

This survey showed that the approximate investment capital needed for a modern broiler plant, exclusive of land, was about \$4,500 for a 6,000-bird-capacity house, or about 75 cents per square foot of floor space. A full-time operator would need at least three such houses to utilize fully his time, which would represent an investment of \$13,500. Growers who entered the broiler business several years ago had facility cost as low as 25 cents per bird. Smaller houses and lack of automatic equipment accounted, in large part, for the lower costs.

While these capital outlays represent the requirements for a full-time producer, actually the greater part of the production is carried on by part-time producers with much less capital investment.

In addition to investment in facilities for growing broilers, the producer must have operating capital for the purchase of chicks, feed, supplies, medicines, litter and utilities and hired labor if any is used. For each 6,000-capacity house, the average producer in 1955-56 needed by marketing time approximately \$3,600 operating capital, or 60 cents to produce each 3-pound broiler. The greater part of this capital would not be needed until the latter part of the production period when feed requirements are greatest. A full-time operator producing 18,000 3-pound birds for market would need, on this basis, \$10,800 operating capital.

### ***Sources and Terms of Investment Capital***

High building and equipment costs make it necessary for most producers entering the business to borrow the long-term investment capital. Most of the original broiler growers in Texas provided their own capital to buy land and to build and equip broiler houses. With the proved

soundness of the industry, individuals and some agencies now are providing adequate and liberal credit for house construction and equipment.

Of the 41 cash producers covered in this survey, 75 percent had provided their own funds for house and equipment expenditures. These producers had been in business an average of 9 years.

Generally speaking, a qualified farmer wishing to go into the broiler producing business and with sufficient equity in his farm can obtain, at reasonable cost, the long-term capital needed to construct and equip his broiler houses. All the growers interviewed in this study owned their farms, which average 157 acres. Most of the borrowed capital for broiler-growing facilities is provided by individuals or lumber dealers. A few commercial banks and some feed dealers supplied a part of the needed finance. The Federal Housing Administration finances a small percentage.

The borrower owning his land, usually already improved, ordinarily gives his real estate and the newly built and equipped broiler house under a mechanics or materials man's lien as security for the loan. The loans usually mature within 5 years and most carry a 6 percent annual rate of interest. Repayment generally is made in equal quarterly installments plus the interest for the 3 months' period. Since most borrowers produce four broods per year, their repayment schedule usually coincides with broiler sales.

### ***Sources and Terms of Operating Capital***

Broiler producers must have funds of their own, or borrow and pay cash, or obtain their production items from a supplier on some kind of credit arrangement.

Less than 10 percent of the Texas broiler producers provide their own funds for production expenses or borrow the funds and pay cash for production items. Eight percent of the cash producers included in this study borrowed funds to pay cash; 92 percent used their own funds to carry on a cash operation. The few that borrowed did so from commercial banks on general security at regular bank rates and terms. Some producers,

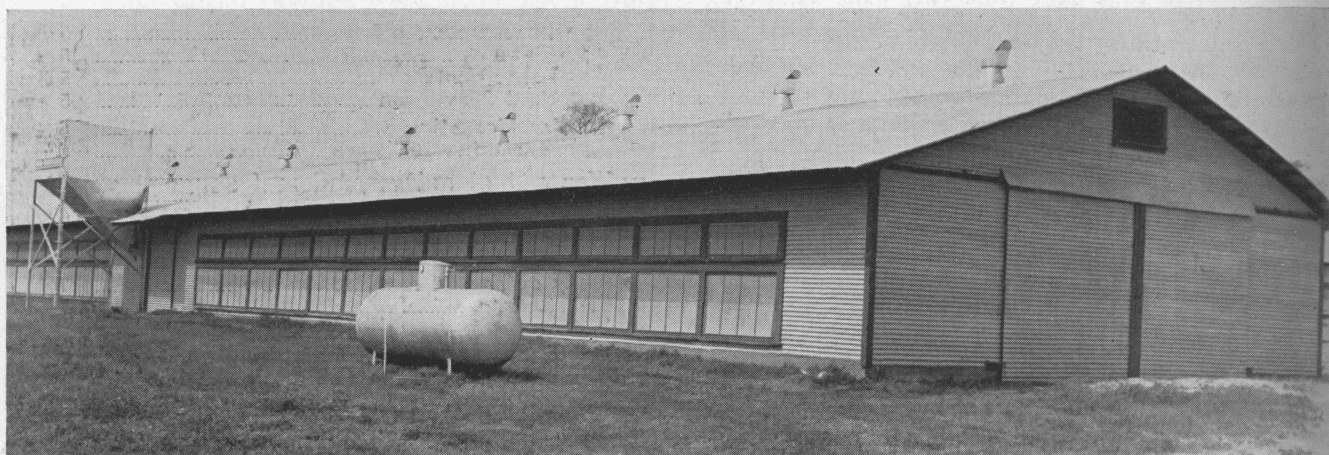


Figure 1. Modern broiler house. Picture courtesy of Texas Farm Products Company, Nacogdoches.



although they could pay cash, preferred to use a dealer-credit arrangement to avoid the risk involved. Most dealer-lenders were willing to absorb this risk.

Over 90 percent of the Texas broiler producers are financed for most of their production expenses by dealers supplying feed and other production items to the growers. A few large mixed-feed manufacturers, supplying principally bulk feed direct to growers, provide considerable credit. Most of the dealers, however, are local middlemen handling sacked feed for manufacturers or buying the ingredients for mixing and selling direct to local growers, most of whom they also finance.

Hatcherymen and processors seldom finance broiler growing in Texas as they do in some other states. Commercial banks do little direct financing of the grower although indirectly they provide most of the operating capital through loans to dealers who in turn finance the growers.

Feed dealers provide most of the operating capital to broiler producers in Texas, in the form of the cost of chicks, feed and other production items, because it assures them of a market for these production items in which they have a margin of profit. Dealers, eager to expand sales, have been willing to provide complete financing, full production and marketing services. As competition has increased in the industry, they also have assumed more and more of the production and price risk.

## FINANCING PLANS FOR OPERATIONS

A number of operating capital financing plans have been devised by dealers for growers. Under all financing plans, the dealer exercises considerable control over the production and marketing of the birds, and producers generally welcome and rely on help from their dealers. Such decisions as the number to buy and when to start the chicks, type of broiler to grow, type of feed to use and when to sell generally are joint decisions. Disagreements between a grower and his dealer are rare. Growers generally, including cash growers, depend heavily on dealer services other than purely financing services.

### Open Account

The open-account plan of financing is offered by most feed dealers and is the only credit plan offered by many.

Under the open-account plan, the grower buys his chicks, feed, medicine and other supplies from his dealer on open account and pays the account when the broilers are marketed. The dealer ordinarily takes a chattel mortgage on the birds. If the returns from the sale of broilers do not cover the amount of the credit extended, the producer is liable and pays the difference from his next sale of broilers. The financing charge made under the open-account plan averages about 1 cent per chick started with no discount on feed.

### Guaranteed No Loss

The guaranteed-no-loss plan of financing has been widely used in Texas during the past few years especially during periods of low prices.

This arrangement is similar to the open-account plan except that should the returns from the sale of broilers be less than the credit extended, the dealer absorbs the loss and closes the account. The producer still would receive the full difference between the amount of his account and the proceeds of the sale when the proceeds were greater than the amount of his account. The cost to the grower for the no-loss-guarantee is generally 1 cent per chick in addition to the usual 1 cent per chick for open-account financing.

### Flat Fee

The dealer under the flat-fee plan furnishes the feed, chicks, medicine and other production items; the producer furnishes the house, equipment and labor. The dealer retains title to the birds and pays the producer a flat fee per bird or a flat fee per pound of live weight sold. This plan assures the grower of some return for the use of his facilities and for his labor, with the dealer absorbing any losses which occur.

### Labor Contract

Under the labor-contract arrangement the grower is paid so much per 1,000 birds started for the use of his broiler-growing facilities and for his labor during the production period. The dealer furnishes all production items and assumes all risks of loss should the proceeds from broilers sold not equal the charges against the grower's account. The grower receives his fixed guaranteed wages from the dealer, which usually are paid to him weekly.

### Feed Conversion

The feed-conversion financing plan is offered by some dealers. Under this plan, the dealer furnishes the chicks, feed and medicine and the grower the houses, labor and other supplies. The dealer retains title to the broilers which are grown under contract with the producer. The grower is

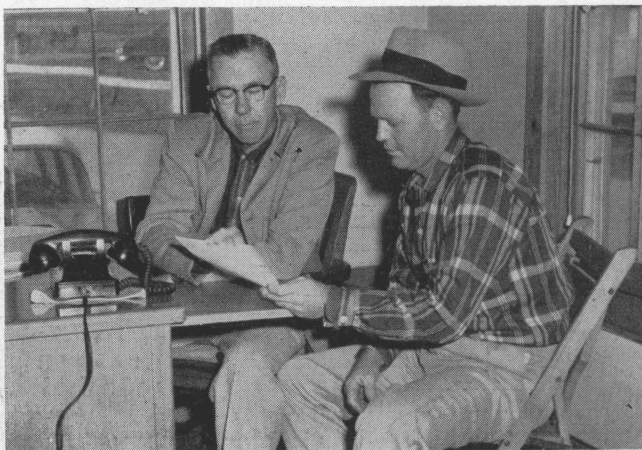


Figure 2. Producers arrange their credit with dealers.

paid a fixed amount per pound according to a schedule based on the feed-conversion ratio obtained by the grower. If the grower does a good managerial job, he receives a higher return with his good feed conversion; his returns are low for a poor feed conversion.

Broiler growers have shown a definite tendency to shift from a cash or open-account plan of financing to one of the no-loss, limited-loss or guaranteed-income plans during a period of low or prospective low price periods for broilers. During price improvement periods, growers have a tendency to assume more risk with prospects of higher returns.

Growers selecting the flat-fee, labor-contract or feed-conversion plans actually are not concerned about the cost of items supplied by the dealer unless poor management by them runs the cost too high and the dealer drops them as customers.

## **BROILER MARKETING**

Practically all live broilers in Texas are sold directly from farm to processor by the feed dealers who have supplied the needed production items and most of the necessary financing. This is the procedure even for the small proportion of the producers who have paid cash for their chicks, feed and other supplies.

### ***Marketing Decisions***

The dealer and the grower, having a close working relationship during the production period, determine jointly when the birds are ready for market and mutually agree on the time of selling. Since the dealer's serviceman frequently visits the producer and sees the birds, he is in an excellent position to know when the birds are ready for market.

When the selling time has been decided, the dealer contacts processor buyers for bids on the producers' birds, or the birds being grown for the dealer, makes the sale to the highest bidder and a time for delivery to the processor is fixed. Processors need regular supplies of live birds and by purchasing from dealers rather than directly from growers, they generally are assured of the number and quality of birds needed for their continuous operations.

### ***Integration in Selling***

There is much less integration in the selling of broilers or in the performance of the other marketing functions in Texas than in some of the other important broiler-producing states.

While practically all growers depend on the local feed dealer or supplier to sell their birds, there is no formal or legal agreement referring specifically to selling, unless the grower is on a fixed or guaranteed-return basis from the dealer. A grower could sell his own birds just so he paid his account or fulfilled his dealer agreement from the proceeds of the sale. This is rarely the case

because the dealer is in better position to do the selling.

Most dealers sell to more than one processor, depending on location and where he can do best for himself or his grower. Usually a dealer sells a complete brood or at least a full house of birds to one buyer.

There is little integration of ownership or control among chick hatcheries, feed manufacturers, local dealers and processors in Texas, as compared with other states.

### ***Age and Weight of Birds at Sale***

Broilers usually are sold at about 60 to 70 days of age when, under good management, they weigh 3 pounds. The 84 cash broods covered in this survey ranged from 54 to 81 days when sold. The average age at which the birds were marketed was 66 days and the average weight was approximately 3 pounds.

### ***Transportation***

A few processors transport the birds they purchase and some independent truckers buy broilers for resale to processors. Most broilers, however, are delivered to the processing plants by the grower's feed dealer in his own coops and trucks. The dealer usually sends his truck with a catching crew to the grower's broiler house, and with the help of the grower, the birds are cooped, loaded and moved to the processing plant. Processing plants are located in all the commercial producing areas to which most broilers are sold. The birds may be weighed in transit on public or other scales agreed on, or may be weighed on the processor's scales.

### ***Cost of Handling***

The cost of handling broilers from the grower to the processor consists of the cost of using the catching crew and transportation. Catching-crew expense averages about \$3 per 1,000 birds. Transportation cost ranges from one-half to 1 cent per pound, depending on the distance to the processing plant.

Catching-crew charges are paid by producers who operate on a cash or open-account basis; under all other financing arrangements, this expense is paid by the dealer. The processor usually pays the dealer for delivering the birds to his plant. Dealers owning the birds under grower contracts and growers retaining title to the birds receive the same market price.

### ***Price Determination***

Texas dealers use the Federal-State Daily Broiler Market News report and quotations service from Austin in agreeing on prices to be received from processors. The price paid for broilers usually is the quoted price, which is the farm price in the three areas for which prices are quoted. The prices quoted are determined from processor reports to the Market News Service in Austin.



## Culling and Grading

Broilers generally are culled by producers during the production period and by market time little additional culling is necessary. The catchers generally take out any undergrade birds that would not be acceptable to a processor. Better chicks, feed, new medicines and better management have raised the general level of quality in recent years, resulting in a greater percentage of birds of higher grade going to market.

## Outlets

Over 95 percent of Texas-produced broilers are sold to processing plants within the State. Most of the broilers are bought by local processing plants which are located within the major broiler-producing areas of the State.

Ready-to-cook broilers, ice packed or quick frozen, are moved from local processing plants to wholesale houses or direct to retail stores in the larger consumer areas, mainly within Texas.

## EFFECTS OF FINANCING

Most broiler growers in Texas by early 1956 were operating under one of the guaranteed financing plans previously described. Competition has forced most dealers to offer growers one or more of the various financing plans, which are commonly referred to as "deals."

While there are some differences in the production cost of growers operating under the various financing plans, they all necessarily increase the cost of production over a cash operator's cost. This is caused by the necessity of making a financing charge which reflects the risk assumed by the dealer. Under any of the guaranteed or fixed-income plans, the producer does not actually pay any of the higher costs. The dealer, is compensated in the form of higher chick and feed prices charged to the grower, and in some instances by the addition of extra financing charges.

## Open-account and Cash Growers

In this analysis of cash and open-account growers, special attention was given to how much a grower saved by paying cash for his chicks, feeds and other necessary production items as compared with open-account producers. Costs of credit under the other plans of financing are based on these cash costs to the producer or to the dealer's cash cost. Through any of the financing plans offered, dealers must eventually recover their costs of doing business plus the cost of items supplied their growers. Under competitive conditions, dealers will charge out the chicks and feed to their growers at prices sufficiently above cash prices to cover the added risk under the various financing arrangements with the growers.

In addition to cost-returns records obtained from producers on 84 cash broods, cost-returns records also were obtained from producers and

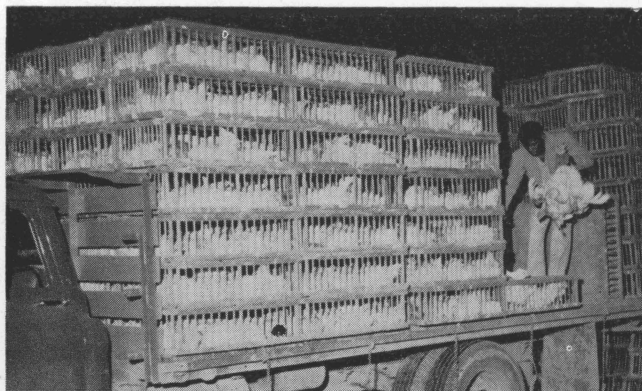


Figure 3. Loading broilers for market.

dealers on 45 open-account broods. The differences in production costs and returns of cash producers and open-account credit producers are shown in Table 2.

The average size brood under the open-account plan of financing averages about the same as for the cash producers in this random sample of producers.

The average age of birds at time of sale, the average weight per bird and the feed-conversion records were practically the same for the open-account and cash producers. The mortality rate was slightly less for the cash producers. This indicates scarcely any difference in the production efficiency of open-account and cash producers. Dealers provided the same services for their cash growers as for growers they financed.

The comparison between feed and chick costs showed significant differences. The open-account producers paid an average of \$5.19 per hundredweight for their feed while cash producers paid an average of \$4.88 per hundredweight, a saving of 31 cents per hundredweight for the cash producers. The open-account producers paid an average of 16.39 cents per chick started, whereas the cash producers paid 15.10 cents per chick started, a saving for the cash producers of 1.29 cents per chick.

Using these data as a basis, a cash producer could save approximately \$24 in feed cost and \$13 in chick cost, a total of \$37 per 1,000 3-pound

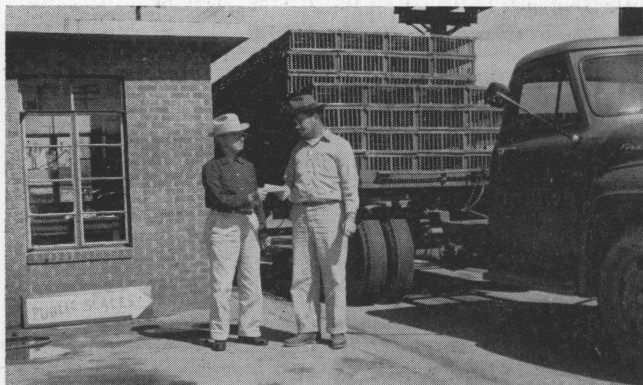


Figure 4. Trucks are weighed empty and after loading broilers.

birds produced, by paying cash for his feed and chicks. This is a substantial saving for producers in position to operate on a cash basis.

### Cost per Pound

On the basis of cost per pound, little difference was found in the cost of production items other than on chicks and feed. The cost for the open-account producers was slightly higher for fuel, electricity, litter, medicine, vaccine and insurance; the cost of hired labor was a little more for the cash producers. Supply costs were negligible on a per-pound basis for both types of producers and usually could not be charged accurately to single lots of birds. These calculations did not include interest on the grower's investment, depreciation, taxes or other overhead costs of the grower.

The cost per pound of the open-account lots ranged from 19.64 to 21.89 cents per pound. The

TABLE 2. COMPARISON OF GROWERS OPERATING UNDER THE OPEN-ACCOUNT FINANCE PLAN AND GROWERS OPERATING ON A CASH BASIS, 1955-56

Item	Open account	Cash
Birds in sample	254,950	454,300
No. of broods	45	84
Av. size brood (without extras)	5,665	5,408
Av. no. birds sold	5,447	5,246
Mortality, percent <sup>1</sup>	5.84	4.99
Av. age at sale, days	67.25	66.08
Av. wt. per bird, pounds	2.9936	2.9988
Feed conversion, pounds	2.6295	2.6345
Feed cost per cwt., dollars	5.19	4.88
Chick cost, cents	16.39	15.10
Av. price per pound, cents	22.94	23.36
Costs per pound, cents		
Chick	5.4750	5.0353
Feed	13.6471	12.8563
Fuel and electricity	.3464	.2848
Litter	.2230	.2082
Medicine and vaccine	.5198	.4610
Insurance	.0512	.0510
Hired labor	.1601	.5138
Total cost per pound, cents, exclusive of overhead costs	20.4226	19.4104
Cost per pound, cents, exclusive of hired labor and overhead cost	20.2625	18.8966
Return to grower, exclusive of overhead cost		
Per pound sold, cents	2.52	3.95
Per bird sold, cents	7.54	11.84
Per thousand birds sold, dollars	75.40	118.40

<sup>1</sup> Two percent extras included in percent mortality.



Figure 5. Packing dressed broilers for delivery to retail stores.

average cost was 20.42 cents per pound. For the cash lots, the range was 17.13 to 25.32 cents per pound, an average of 19.41 cents per pound. Excluding hired labor, the average cost was 20.26 cents per pound for the open-account lots and 18.89 cents per pound for the cash lots. The average savings for the cash producers amounted to 1.01 cents per pound including hired labor and 1.36 cents per pound excluding hired labor.

### Prices Received

Prices received by cash growers averaged slightly higher than prices received by open-account growers for the broods on which data were collected. If records could be obtained on a larger number of broods for both types of growers, they probably would reveal little difference in prices received by cash growers and credit growers. Dealers generally did the selling for both their cash and credit customers, with no evidence of differences in prices received by their growers.

### Returns to Growers

The average return to the open-account growers was approximately 2.52 cents per pound, or 7.54 cents per bird, while the return to the cash growers was 3.95 cents per pound, or 11.84 cents per bird. The open-account growers received a return of \$75.40 per 1,000 birds while cash growers received \$118.40. This difference of \$43 per 1,000 for cash growers was not adjusted to the price difference received by the cash and credit growers. When adjustments were made for price difference, the cash growers received \$30.40 more per 1,000 birds than the credit growers. These analyses showed that the highest returns were obtained by the cash producers during this period. During periods when returns fail to cover cash or open-account production costs, the grower would find it advantageous to operate under one of the guaranteed-income plans offered by dealers.